

Amendments to the Claims

The following listing of claims replaces all prior versions of the claims and all prior listings of the claims in the present application.

1-14. (canceled)

15. (new) A pneumatic tyre for a vehicle wheel, comprising:

a toroidal carcass;

a tread band;

a belt structure; and

at least one reinforcing layer associated with the carcass;

wherein the carcass comprises at least one carcass ply having a substantially continuous right-section profile,

wherein the carcass has a central crown portion and two axially opposite sidewalls,

wherein each sidewall terminates with a bead for mounting the tyre on a corresponding rim,

wherein each bead comprises at least one reinforcing core,

wherein the tread band is disposed crownwise, coaxially extending around the carcass,

wherein the tread band comprises a raised pattern for rolling contact with the ground,

wherein the belt structure is coaxially interposed between the carcass and the tread band,

wherein the tyre has a size ratio f/H less than 0.2:1, and

wherein the at least one reinforcing layer is disposed radially external to a point of maximum axial width of the carcass and axially external to the belt structure.

16. (new) The tyre of claim 15, wherein ends of the at least one carcass ply extend in a radially external direction not beyond half a radial height of respective reinforcing cores.

17. (new) The tyre of claim 15, wherein ends of the at least one carcass ply do not turn up around respective reinforcing cores.

18. (new) The tyre of claim 15, wherein the at least one reinforcing layer comprises a substrate.

19. (new) The tyre of claim 18, wherein the substrate comprises an elastomer material.

20. (new) The tyre of claim 19, wherein the elastomer material is reinforced with fibers.

21. (new) The tyre of claim 15, wherein the at least one reinforcing layer comprises a plurality of cords.

22. (new) The tyre of claim 15, wherein the at least one reinforcing layer comprises a plurality of high-elongation-type cords.

23. (new) The tyre of claim 21, wherein the at least one reinforcing layer comprises a substrate of a varying thickness depending on radial height, and wherein the cords are spiraled at constant pitch.

24. (new) The tyre of claim 21, wherein the at least one reinforcing layer comprises a substrate of substantially constant thickness, and wherein the cords are spiraled at varying pitch depending on radial height.

25. (new) The tyre of claim 15, wherein the at least one reinforcing layer comprises an elastomer material reinforced with fibers.

26. (new) The tyre of claim 25, wherein the fibers comprise aramidic fibers.

27. (new) The tyre of claim 15, wherein the at least one reinforcing core comprises:
a bead ring;
wherein the bead ring comprises a set of coils of metal wire disposed radially superposed on each other and in axial side-by-side relationship.

28. (new) The tyre of claim 15, wherein an extension of the at least one carcass ply between the beads comprises a neutral profile with a continuous curvature devoid of inflection points.

29. (new) The tyre of claim 15, wherein an extension of the at least one carcass ply between the beads comprises a neutral profile passing within fields delimiting an assembly of right-section areas of respective bead rings.

30. (new) The tyre of claim 15, wherein an extension of the at least one carcass ply between the beads comprises a neutral profile passing through a center of gravity of respective bead rings.